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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

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Mike PAELMER, Claus-Dieter REINIGER and  
Daniel ZAUNER

Appln. No.: 10/790,388

Filed: March 1, 2004

For: PROCESS FOR LASER WELDING COATED PLATES

Attorney Docket No.: 3926.069

Customer No.: 000041288

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §1.97 and §1.98**

**Mail Stop Amendment**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56, Applicants hereby notify the U.S. Patent and Trademark Office of the following documents for the above-identified application. Copies of the documents set forth below and listed on the attached Form PTO-1449 and copy of an Office Action which issued in the corresponding German patent application are provided herewith.

1. Japanese Patent Abstract No. 042 31 190 A
2. German Patent Application No. 195 06 768 A1
3. German Patent Application No. 44 07 190 A1
4. Japanese Patent Abstract 110 47 967 A
5. US Patent 5,767,479

U.S. Application No. 10/790,388  
INFORMATION DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: 3926.069

Document 1

Japanese Patent Abstract No. 042 31 190 A entitled "METHOD AND DEVICE FOR LASER WELDING GALVANIZED STEEL SHEET" published on August 20, 1992.

It has already been proposed in accordance with Document 1 in the present specification to provide no gap between the sheets, but rather to position these over each other, then first to warm by means of a first laser beam until evaporation of the coating, and subsequently to weld the uncoated sheets by means of a second laser beam. Both laser beams and their associated optical devices are guided by means of a robot. A disadvantage therein is primarily the complexity and expense for the equipment of the two required optical systems.

Document 1 is in the English language.

Document 2

German Patent Application No. 195 06 768 A1 entitled "Cutting and welding coated material with laser beam" published on August 31, 1995.

Document 5 is submitted herewith as an English language document in the patent family of Document 2.

Document 3

German Patent Application No. 44 07 190 A1 entitled "PROCESS FOR PREPARING THE SEAM REGIONS OF COATED WORKPIECES FOR LASER BEAM WELDING AND LAP JOINT FOR WELDING COATED WORKPIECES" published on September 7, 1995.

Applicants are not aware of any English language document equivalent to Document 3, other than an English language abstract:

A process for preparing the seam regions (20) of coated workpieces (2, 3) for laser beam welding (5), especially galvanised sheet steel, in which knurled type surface structures in the region of the weld seam (50) which provide a space (a) between adjacent workpiece surfaces (44, 45) are produced. In order to improve a process with the steps described above in such a way that the drawbacks entailed by the mechanical process are avoided, in which the process is to be used especially also for three-dimensional adjacent workpiece surfaces, the knurled surface structures (51, 51') are produced by pulsed high-energy beams.

Document 4

Japanese Patent Abstract No. 110 47 967 A entitled "WELDING METHOD" published on February 23, 1999.

For improvement of the connection quality it has already been proposed to use spacers to produce narrow gaps between the sheets such that the vaporized coating material can escape. Suitable crater shaped spacers can be produced by laser strafing the upper surface (irradiating the sheet metal with pulsed laser to form roughness) according to Document 4 in the present specification.

Document 4 is in the English language.

The present Information Disclosure Statement is being filed after three months from the application's filing date but before the mailing date of the first Office Action on the merits,

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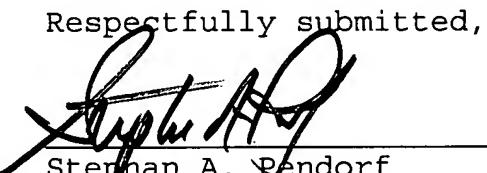
ATTORNEY DOCKET NO.: 3926.069

therefore no Certification Under 37 C.F.R. §1.97(e) or fee under 37 C.F.R. §1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedated or otherwise remove any listed document as a competent reference against the claims of the present application.

Applicant respectfully requests that the listed documents be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

Respectfully submitted,



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Dated: July 23, 2004

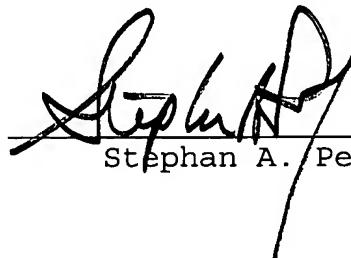
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**CERTIFICATE OF MAILING AND AUTHORIZATION TO CHARGE**

I hereby certify that the foregoing INFORMATION DISCLOSURE STATEMENT Form PTO-1449, including three (3) documents, for U.S. Application No. 10/790,388 filed March 1, 2004, were deposited in first class U.S. mail, postage prepaid, P.O. Box 1450, Alexandria, VA 22313-1450, on July 23, 2004.

The Commissioner is hereby authorized to charge any additional fees which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment, to Deposit Account No. 16-0877.



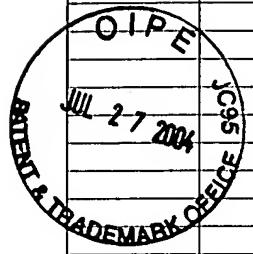
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Stephan A. Pendorf

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete If Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/790,388
		Filing Date	03/01/04
		First Named Inventor	Wolfgang BECKER
		Art Unit	
		Examiner Name	
(use as many sheets as necessary)			
Sheet	of	Attorney Docket No.	
		3926.069	

## U.S. PATENT DOCUMENTS



## FOREIGN PATENT DOCUMENTS

CITED FOREIGN DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		JP 042 31 190 A (abstract)	08/20/1992	Torii Nobutoshi et al.	
		DE 195 06 768 A1	08/31/1995	Masaru Kanaoka	
		DE 44 07 190 A1	09/07/1995	Fischer Rainer et al.	
		JP 110 47 967 A (abstract)	02/23/1999	Nakamura Tsuyoshi et al.	

<b>Examiner Signature</b>	<b>Date Considered</b>
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.